NEW SPECIES AND RECORDS OF THE SUBGENUS OXYPORUS OF THE GENUS OXYPORUS FROM YUNNAN, CHINA (COLEOPTERA, STAPHYLINIDAE, OXYPORINAE)

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Abstract Four species of the subgenus Oxyporus of the genus Oxyporus are reported to occur in Yunnan, China, of which two are new species, Oxyporus (Oxyporus) yulong sp. nov., O. (O.) iii sp. nov., and other two, O. germanus Sharp, O. transversesulcatus Bernhauer, are found for the first time in Yunnan Province. These species are described and illustrated and all the type specimens are deposited in the Life Science College, China West Normal University, Sichuan.

Key words Staphylinidae, Oxyporinae, Oxyporus, new species, China.

The subgenus Oxyporus, until now 34 species have been recorded from China, but only 3 species are reported to occur in Yunnan (O. riparius Zheng, 1997; O. femoratus Zheng, 2010; O. bifasciarius Zheng, 2010).

In the paper, four species of the subgenus Oxyporus of the genus Oxyporus are reported based on specimens from Yunnan, China. Of them two are new species, Oxyporus (Oxyporus) yulong sp. nov. and O. (O.) lii sp. nov., described and illustrated in the text. New distributional data of O. germanus Sharp and O. transversesulcatus Bernhauer are involved.

Type specimens are deposited in the Life Science College, China West Normal University, Sichuan.

Oxyporus (Oxyporus) yulong sp. nov. (Figs 1-9)

Diagnosis. This species is very similar to O. germanus Sharp from Japan and China, but can be recognized by head black with subtriangular yellow marking in posterior angles, pronotum brownish yellow except posterior margin and mid-longitudinal fascia black, aedeagus with apices of parameres bearing two minute apical setae different in size.

Description. Body moderately stout, surface almost smooth and shining. Head black except subtriangular yellow markings at posterior angles; antennae, labrum, maxillary and labial palpi brownish yellow; mandibles and underside of head black; pronotum brownish yellow with black posterior margin and with broad black mid-longitudinal fascia in on midline, prosternum and scutellum black; elytra brownish yellow with small black area in basal portion of suture, each elytron with larger subtriangular black marking at outer apical angle extending from posterior three fifths of lateral margin to middle of posterior margin and meeting with each other by narrow black

fascia near posterior margin; meso-metasternum black; legs brownish yellow; abdomen black; sides of segments 3 - 6 and apical portion of sternite 8 yellow.

Length 6.9 - 7.8 mm.

Male. Head subquadrate, wider than long (ratio 1.6), slightly broader than pronotum (ratio 1.19) and almost equal in length, gently arcuate behind eyes, posterior angles obtuse; eyes slightly large and convex, temples longer than eyes seen from above (ratio 1.25). Antennae slightly longer than head (ratio 1.08); segments 1 - 4 elongate; segments 5 - 10 transverse, slightly asymmetrical and flattened; apical segment narrower than preceding segment; all antennal segments with long setae near apices, segments 6 - 10 with axial parts glabrous and lateral parts covered with fine setae. Labrum broadly and deeply emarginate at anterior margin; mandibles about as long as head, moderately broad, inner edges evenly curved to acute apices; maxillary palpi with first segment shortest, second longer than third, third slightly wider than last and almost equal in length; apical segment of labial palpi wider than length of eye (ratio 1.2). Clypeus with anterior margin broadly, shallowly emarginate medially; frons broadly, shallowly bi-impressed between antennal insertions; vertex nearly smooth, one setiferous punctures close to anterior inner margin of eye, another near posterior inner margin.

Pronotum wider than long (ratio 1.25), shorter (ratio 0.6) and narrower (ratio 0.6) than elytra, lateral margins slightly sinuate anteriad and subarcuately narrowed posteriad, widest at about anterior third; disc almost impunctate, deeply transversely depressed before middle, two vague postmedian depressions near middle of posterior margin; six setiferous punctures along anterior margin, two ones close to posterior margin, a few ones at or near



Figs 1 – 9. Oxyporus (Oxyporus) yulong sp. nov. 1 – 2. Dorsal habitus. 1, 3. Male. 2, 4. Female. 3 – 4. Sternite 8. 5 – 7. Aedeagus. 5. Ventral view. 6. Lateral view. 7. Dorsal view. 8 – 9. Apical portions of parameres. 8. Left. 9. Right.

lateral margins.

Scutellum impunctate, apex rounded.

Elytra wider than long (ratio 1.24), slightly widened apicad; each elytron with a row of regular small punctures along suture, two longitudinal rows of coarse irregular punctures in middle, scattered coarse punctures on medial and lateral sides of rows; lateral and apical margins bearing a few short setae. Wings developed.

Abdomen with tergites 3 – 4 each with a pair of pruinous spots in middle; punctation of tergites very sparse and vague, surface between punctures with exceedingly fine and dense microsculpture of transverse striae; sternite 8 slightly and broadly emarginate at posterior margin.

Aedeagus asymmetrical; median lobe slightly widened apicad, apical margin rounded; parameres slightly long, apices bearing two minute apical setae different in size.

Female. Similar to male, but head about as wide as pronotum, mandibles slightly shorter than that of the male, sternite 8 arcuately produced at posterior margin.

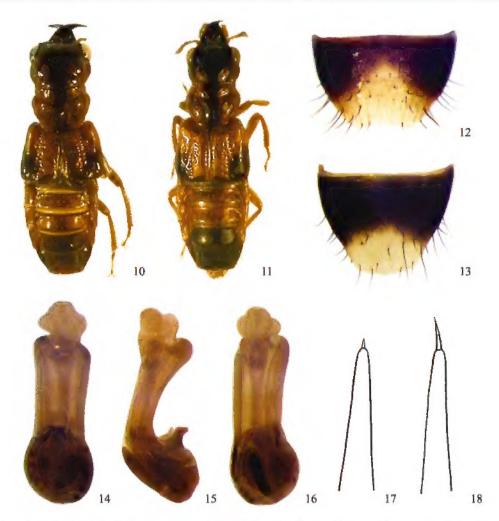
Holotype male, China, Yunnan, Yulongxueshan Natural Reserve, Lijiang City (27°03′ – 27°40′ N, 100°04′ – 100°16′E; alt. 3 000 m), 7 Aug. 2006, collected by YANG He. Paratypes: 1 ♂, same data as holotype; 2 ♀ ♀, alt. 3 100 m, 13 Aug. 2006, locality and collector ditto.

Habitat and Distribution. The species was found in fungi. It is at present known from the type locality in Western Yunnan.

Etymology. The specific epithet is from the partial Chinese name of the type locality (Yulongxueshan), Yulong.

Oxyporus (Oxyporus) lii sp. nov. (Figs 10 - 18)

Diagnosis. This species is very similar to *O. yulong* sp. nov. from Yulongxueshan Natural Reserve, Lijiang City, but can be recognized by posterior portion of gula and metasternum brownish yellow, basal portion of suture without small black area,



Figs 10 – 18. Oxyporus (Oxyporus) lii sp. nov. 10 – 11. Dorsal habitus. 10, 12. Male. 11, 13. Female. 12 – 13. Sternite 8. 14 – 16. Aedeagus. 14. Ventral view. 15. Lateral view. 16. Dorsal view. 17 – 18. Apical portions of parametes. 17. Left. 18. Right.

abdominal segments 3 - 5 entirely yellow to brownish yellow.

Description. Body moderately stout, surface almost smooth and shining. Head black except subtriangular yellow marking at posterior angle; antennae, labrum, maxillary and labial palpi yellow; mandibles and underside of head black; posterior portion of gula brownish yellow; pronotum brownish yellow with yellow posterior margin and with broad black mid-longitudinal fascia in on midline, prosternum and scutellum black; elytra brownish yellow, each elytron with a larger subtriangular black marking at outer apical angle extending from posterior three fifths of lateral margin to middle of posterior margin and meeting with each other by narrow black fascia near posterior margin; mesosternum black, metasternum brownish yellow; legs yellow; abdominal segments 3 - 5 brownish yellow, abdominal segments 6-7 black except sides of segment 6, apical portion of sternite 8 yellow.

Length 7. 2-7.5 mm.

Male. Head subquadrate, wider than long (ratio

1.5), slightly broader than pronotum (ratio 1.07) and almost equal in length, gently arcuate behind eyes, posterior angles obtuse; eyes large and convex, temples slightly longer than eyes seen from above (ratio 1.15). Antennae almost as long as head; segments 1 - 4 elongate; segments 5 - 10 transverse, slightly asymmetrical and flattened; apical segment narrower than preceding segment; all antennal segments with long setae near apices, segments 6 - 10 with axial parts glabrous and lateral parts covered with fine setae. Labrum broadly and deeply emarginate at anterior margin; mandibles about as long as head, moderately broad, inner edges evenly curved to acute apices; maxillary palpi with first segment shortest, second longer than third, third slightly wider than last and almost equal in length; apical segment of labial palpi wider than length of eye (ratio 1.17). Clypeus with anterior margin broadly, shallowly emarginate medially; frons broadly, shallowly bi-impressed between antennal insertions; vertex nearly smooth, one setiferous punctures close to anterior inner margin of eye, another near posterior inner margin.

Pronotum wider than long (ratio 1.33), shorter (ratio 0.7) and narrower (ratio 0.72) than elytra, lateral margins slightly sinuate anteriad and subarcuately narrowed posteriad, widest at about anterior third; disc almost impunctate, deeply transversely depressed before middle, two vague postmedian depressions near middle of posterior margin; six setiferous punctures along anterior margin, two ones close to posterior margin, a few ones at or near lateral margins.

Scutellum impunctate, apex rounded.

Elytra slightly wider than long (ratio 1.07), slightly widened apicad; each elytron with a row of regular small punctures along suture, two longitudinal rows of coarse irregular punctures in middle, scattered coarse punctures on medial and lateral sides of rows; lateral and apical margins bearing a few short setae. Wings developed.

Abdomen with tergites 3 - 4 each with a pair of pruinous spots in middle; punctation of tergites very sparse and vague, surface between punctures with exceedingly fine and dense microsculpture of transverse striae; sternite 8 slightly and broadly emarginate at posterior margin.

Aedeagus asymmetrical; median lobe slightly widened apicad, apical margin rounded; parameres slightly short, each with one minute apical seta at apices.

Female. Similar to male, but head about as wide as pronotum, mandibles slightly shorter than that of the male, sternite 8 arcuately produced at posterior margin.

Holotype male, China, Yunnan, Lianhua Village, Puer City (22° 42′ N, 100° 59′ E; alt. 1320 m), 12 – 29 July 2009, collected by LI Guo-Feng and WANG Hui. Paratype: 1 9, Yunnan, Gaoligong Mountain Nature Reserve, among the Baoshan City, Tengchong Town and Lushui Town (24°56′ – 26°09′N, 98°34′ – 98°50′E; alt. 2600 m), 3 Sep. 2006, collected by ZHOU Deng-Xiang.

Habitat and Distribution. The species was found in fungi. It is at present known from the type localities in southwest and Western Yunnan.

Etymology. The specific epithet is patronymic in honor of the collector of the hollotype, LI Guo-Feng.

Oxyporus (Oxyporus) germanus Sharp

Sharp, 1889; 409; Li, J., 1993; 23; Herman, 2001; 1979; Löbl and Smetana, 2004; 535 (China, Jilin, Liaoning, Heilongjiang).

Specimens examined. $3 \ \delta \ \delta$, $5 \ Q \ Q$, Yunnan, Yulongxueshan Natural Reserve, Lijiang City (27°03′ $-27^{\circ}40'$ N, $100^{\circ}04' - 100^{\circ}16'$ E; alt. $3 \ 000 \ m$), 7 Aug. 2006, collected by YANG He; $2 \ \delta \ \delta$, alt. $3 \ 100 \ m$, $13 \ Aug. 2006$, locality and collector ditto.

Comments. This is the first record of O. germanus

Sharp from Yunnan. It was previously recorded from Heilongjiang, Jilin, Liaoning of China, also from Korea and Japan.

Oxyporus (Oxyporus) transversesulcatus Bernhauer
Bernhauer, 1933; 27; Herman, 2001; 1992; Löbl and Smetana, 2004;
536 (China, Sichuan).

Specimens examined. 1 ♂, 3 ♀ ♀, Yunnan, Yulongxueshan Natural Reserve, Lijiang City (27°03′ -27°40′N, 100°04′ -100°16′E; alt. 3 100 m), 22 Aug. 2006, collected by YANG He; 2 ♀ ♀, alt. 3 200 m, 24 Aug. 2006, collected by WANG Zhen-Ji, locality ditto.

Comments. This is the first record of O. transversesulcatus Bernhauer from Yunnan. It is previously known from Kangding County of Sichuan.

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中国云南巨须隐翅虫亚属的新种和新纪录 (鞘翅目,隐翅虫科,巨须隐翅虫亚科)

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摘 要 报道中国云南巨须隐翅虫属 Osyporus Fablicius 和巨须隐翅虫亚属 subgenus Osyporus 的 4 个种, 其中包括 2 新种, 玉龙巨须隐翅虫 Osyporus (Osyporus) yulong sp. nov. 和李氏巨须隐翅虫 O. (O.) lii sp. nov., 补充了仙台巨须隐翅虫 O. germanus Sharp 和横沟巨须隐翅虫 O. transversesulcatus Bernhauer 新的地理分布。

玉龙巨须隐翅虫, 新种 Oxyporus (Oxyporus) yulong sp. nov. (图 1~9)

新种与来自日本并在中国和朝鲜被记录的仙台巨须隐翅虫 O. germanus Sharp 很相似,但能通过头部在后角有近三角形的黄色区,前胸后缘和中纵域黑色,雄性外生殖器侧叶末端仅有2根细毛,可与之鉴别。

关键词 隐翅虫科,巨须隐翅虫亚科,巨须隐翅虫属,新种,中国. 中图分类号 Q969.484.5

词源: 新种种名源自模式产地的部分中文名称"玉龙"。

李氏巨须隐翅虫, 新种 Oxyporus (Oxyporus) lii sp. nov. (图 10~18)

新种与上述玉龙巨须隐翅虫很相似,但外咽片后部和后 胸腹板黄褐色,缝的基部无小黑域,腹部3~5节完全黄色至 黄褐色,与之有别。

正模 δ , 云南普洱市莲花乡, 2009-07-12 ~ 29, 李国锋、王惠采。副模 1 $\mathfrak P$, 云南保山市高黎贡山自然保护区, 2006-09-03, 周登祥采。

词源:新种种名源于正模采集者"李国锋"的姓。